PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference ./.	**FOR FURTHER ACTION**	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
International application No. PCT/PL 02/00056	International filing date *(day/month/year)* 24.07.2002	Priority date *(day/month/year)* 01.07.2002
International Patent Classification (IPC) or both national classification and IPC A61K31/404		
Applicant PLIVA KRAKOW, ZAKLADY FARMACEUTYCZNE S.A. et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

   ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

   These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

   - I ☒ Basis of the opinion
   - II ☐ Priority
   - III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
   - IV ☐ Lack of unity of invention
   - V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
   - VI ☐ Certain documents cited
   - VII ☐ Certain defects in the international application
   - VIII ☐ Certain observations on the international application

Date of submission of the demand	Date of completion of this report
19.01.2004	04.08.2004
Name and mailing address of the international preliminary examining authority: European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Zimmer, B Telephone No. +49 89 2399-8600

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/PL 02/00056

I. Basis of the report

1. With regard to the **elements** of the international application *(Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17))*:

Description, Pages

1-4 as originally filed

Claims, Numbers

1-4 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

   These elements were available or furnished to this Authority in the following language: , which is:

   ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).

   ☐ the language of publication of the international application (under Rule 48.3(b)).

   ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

   ☐ contained in the international application in written form.

   ☐ filed together with the international application in computer readable form.

   ☐ furnished subsequently to this Authority in written form.

   ☐ furnished subsequently to this Authority in computer readable form.

   ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

   ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

   ☐ the description, pages:

   ☐ the claims, Nos.:

   ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

   (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes:	Claims	1-4
	No:	Claims	
Inventive step (IS)	Yes:	Claims	
	No:	Claims	1-4
Industrial applicability (IA)	Yes:	Claims	1-4
	No:	Claims	

2. Citations and explanations

see separate sheet

Re Item V

Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Reference is made to the following documents:

   D1: EP-A-0 519 820 (ADIR) 23 December 1992 (1992-12-23) cited in the application

   D2: DAMIEN, GERARD ET AL: 'Galenic development and pharmacokinetic profile of indapamide sustained release 1.5 mg' CLINICAL PHARMACOKINETICS (1999), 37(SUPPL. 1), 13-19 , XP009004369

2. Novelty

   Prior art document D1 discloses sustained release tablets comprising 1.4% (w/w) indapamide as active ingredient as well as lactose (62 %), hypromellose (31 %), polyvidone (3 %) and the lubricants magnesium stearate (1.1 %) and colloidal silica (0.2 %) (ex. 1). The sustained release tablets disclosed in D2, which are prepared by wet granulation using water, differ from the subject-matter of the present application in that the amount of indapamide is below 1.5 % (table 1).

   As the tablets disclosed in D1 lack copovidone as excipient and are prepared by wet granulation with a water/ alcohol solution the subject-matter of the present application seems to be new and thus fulfil the requirements of Art. 33(2) PCT in view of the cited prior art.

3. Inventive Step

   Although the subject-matter of claim 1 of the present application seems to be new in view of the cited prior art it does not seem to be inventive for the following reasons (Art. 33(3) PCT):
   D1 differs from the subject-matter of the present application in the pyrrolidone polymer excipient. Thus, the objective technical problem of the present application seems to be the provision of an alternative sustained release tablet formulation of indapamide.

The selection of copovidone (vinylpyrrolidone vinylacetate copolymer) instead of povidone (vinylpyrrolidone polymer) in the compositions of the present application seems to be arbitrary and cannot "prima facie" be regarded as inventive (Art. 33(3) PCT) for a person skilled in the art, in particular, as copovidone is a well known excipient of tablet formulations.
Furthermore, no convincing evidence (eg comparison tests showing an effect not derivable from the closest prior art) has been presented in order to show that an inventive step is necessary to use the claimed subject-matter for the solution of the posed problem.
If an inventive step is to be based on the presence of an unexpected effect this has to be proven by technical evidence; for instance by comparing the composition of Ex. 1 of D1 with the present application.

Dependent claims 2-3 do not appear to contain any additional features which involve an inventive step when combined with the subject-matter of any claim to which they refer. Dependent claims are only allowable when related to a patentable independent claim (Rule 6.4 PCT).

Independent process claim 4 also seems to be obvious for a person skilled in the art in view of the cited prior art document D2 (p. 14, right col.).